

# MANAGEMENT ACCOUNTING SYSTEMS, CREDIT RISK MANAGEMENT PRACTICES AND ORGANIZATIONAL PERFORMANCE AT COMMERCIAL BANKING SECTOR IN PALESTINE

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**Accepted date:** 29 July 2017

**Published date:** 2 October 2017

## **To cite this document:**

Thabet, A. S. & Alaeddin, O. (2017). Management Accounting Systems, Credit Risk Management Practices and Organizational Performance at Commercial Banking Sector in Palestine. *International Journal of Accounting, Finance and Business*. 2 (5), 136-151.

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**Abstract :** *The aim of this paper is to report the results of a study on the linkages between credit risk management practices and management accounting system (MAS) towards organizational performance through testing the match and joint effects of MAS and CRM on organizational performance. The research method involved administering a questionnaire to 11 commercial banks listed on the Palestinian Monetary Authority website and the respondents were those in the risk management department on banks such as chief executive officers (CEOs), chief risk officers (CROs), chief financial controllers, general managers, risk managers, and bank employees at departments related to risk management in Palestinian commercial banks. Based on the IFAC's (1998) framework and the Bank of International Settlement report (2013), it was found that most of the Palestinian commercial banks have a complete implementation for ERM framework. In light if the relationship between CRM practices and MAS some management accounting practices works to assist in managing credit risks in two main dimensions costing system and budgeting. The finding also confirms the important role of interaction between CRM and the use of costing system MAS towards organizational performance.*

**Keywords:** *Risk Management; Management Accounting System; Commercial Banks*

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## Introduction

Management accounting system is defined by international Federation of Accountants (IFAC,1998) as the procedure of determination, identification, measurement, analysis, preparation, and communication for both of (operational and financial) information which is used for the arranging, planning, and efficacious use of resources by management. Consequently, management accounting system becomes an essential part of the organizations general management process. According to (Cole, 1988) management accounting system provides alert of risk, measurement of performance, information for taking accurate decisions, and data for strategic planning. Wherefore, it is a tool for achieving high performance.

Deregulation and globalization pushed financial institutions to face a dynamic environment. They trade a large range of financial assets that are various and complex, traditional assets (deposits and loans) and financial derivatives. Advance in technology allowed banks to establish a modern efficient delivery and processing channels. Within this complicated and complex environment banks managers need pertinent financial and non-financial information for making accurate decision. Kafafian (2001) and Razaee (2005) argued that, the ability of management to create an appropriate decision is linked to the quality of management information.

Financial institution extend credit to the investors for investment purposes there are possibility that investment may not perform worthy or collapsed to generate positive Net Present Value (NPV). If this scenario happens investors are defiantly unable to refund the credit extended by financial institution and risk of default appears. Credit creation is the main income generating activity of banks (Kargi, 2011). With increase in bank exposure to credit it tendency to undergo a financial crisis also increase. These crisis leads to bad impact on the economy as a whole, particularly when central bank and supervisory authority unable to prevent and address the determinants of the problem. Fundamental portion of bank earning is created from the interest gained on loan extended to their clients. Kithinji (2010) write credit risk mainly arises due to lack of institutional capacity, in appropriation of credit policies, poor quality of management, lapses of laws and regulation and inefficient lending practices and accurate interference of central bank. So, credit risk management indispensable for profitability and bank survival. Chen and Pan (2012) define credit risk as the extent of value fluctuation of loans and derivatives due to change in the credit quality of borrowers and counterparts as well. According to Bassis (2009) credit risk is the potential that a bank borrower/counter party fails to meet their obligations on agreed terms. It is the risk of incurring losses because of the sudden deterioration of the creditworthiness of counterparties. Banks generally utilize depositors' deposit to make credit for the borrowers and this is the greatest and most explicit source of credit risk for most banks loans. Credit activities performed by banks distress them to high default risk drive to financial crisis and failures including insolvency. The Palestinian Authority's Law of 1997 has granted the PMA with the needed discretion to properly support and protect the Palestinian banking system. Which saw banks extends huge amounts of credit with the major objective of increasing profitability. Some of the loans were "government loans" granted with little or no credit assessment. This subsequently drives to adverse relationship between banks debt collection and banks cash quantity rate and loans become non-performing (Tuyen, 2009). The importance of these problems emerges from the risk of banks credit portfolio which is considered the most essential and decisive risk effect financial performance of banks in general.

Management Accounting System (MAS) indicates to the systematic implement of management accounting to achieve the main goals of the organizations. Great design of MAS helps managers to be more efficacious in decision making, thereby aiding organization improving their efficiency and become more competitive toward any challenging environment. This definitely improves the performance of organizations (Ismail and Isa, 2011). Authors like Collier et al., (2004), Soin (2005) and Williamson (2004) have claimed that management accounting system is backing risk management activities. Both of management accounting and risk management are expected to complement each other and support enterprise decision making. MAS affect risk management through risk aggregation, reporting, monitoring and communication. MAS contribute on reducing management decision making uncertainty by providing appropriate information (Winter, 2007).

We can observe that there is a growing body of literature that examines the effect of MAS and performance as well as RM and organizational performance, the knowledge of linkage method MAS and RM that can reinforce the banks performance remains a gap. Soin and Collier (2013) argued that very little is familiar about the relationship between risk management and management accounting system. This research intends to have solid risk management framework especially credit risk management, depending on accurate information for management decision making and appropriate measurement of credit risk. Credit risk management plays a significant role at the banks overall performance and profitability. This is considered the main motivation to procedure this research. Hence, consistent with the discussion above, the research objectives are tested at this study which is:

- 1- To identify the status of adoption of enterprise risk management practiced by the commercial banks in Palestine.
- 2- To examine the relationship between credit risk management and management accounting system and what their effects are on bank's profitability.
- 3- To achieve the efficiency of the interaction of management accounting system and credit risk management practices towards Palestinian banks profitability.

The remainder of the paper is structured as follows. The next section reviews the relevant literature followed by research methodology, results and discussion and finally the conclusion.

## **Literature Review**

Management accounting system is defined by international Federation of Accountants (IFAC,1998) as the procedure of determination, identification, measurement, analysis, preparation, and communication for both of (operational and financial) information which is used for the arranging, planning, and efficacious use of resources by management. Consequently, management accounting system becomes an essential part of the organizations general management process. Management accounting system provides fundamentals information for:

- Accurate controlling of organization current actions and activities;
- Planning organization process, tactics, strategies, and operations;
- Developing and optimizing the use of organization resources;
- Evaluating and measuring performance; and

- Effective improving of internal and external communication.

According to (Cole, 1988) management accounting system provides alert of risk, measurement of performance, information for taking accurate decisions, and data for strategic planning. Wherefore, it is a tool for achieving high performance. Other additional feature of management accounting is using it as a tool to manage organizations resources. The author argues that a proper MAS does the following:

- Avoid managers of facing a work surprises;
- Identifies the organization cost and profitability of running business;
- Allows all managers to illustrate their performance as it is reported; and
- Eliminates complaints about information availability.

According to IFACs (1998) framework, the evolution of management accounting is categorized into four identifiable stages. In stage 1, Cost determination and financial control stage, until 1950. Financial statement consists of income statement; balance sheets and cash flow statement are the main sources of data. Factors had direct influence in management accounting methods development: (1) western strong economic position that encouraged international demand, for its products, (2) relatively weak competition, (3) low attention to quality. In the second stage of evolution, information for management planning and control, from 1950 to 1965. The essential purpose of this stage is to distinguish management accounting information for management processes and controlling them. This stage considers introducing stage for accounting and management accounting techniques that assist and support decision analysis. These techniques include marginal costing, standard costing, IFAC (CVP) analysis, Break-even analysis and transfer pricing. Add to that, this stage is characterized by manufacturing process and internal analysis of companies. This stage is directed towards manufacturing and administrating internal issues rather than strategic considerations (Abdel-Kader and Luther, 2008). The third stage of management accounting evolution is represented after the global recession in the 1970s, which is followed by accretion global competition and wide development of technology in the last two decades. Stage of reduction of waste of resources in business processes 1965 to 1985. This stage focuses on the implementation of process analysis and cost management technologies. The goal is to reduce non-value added activities with specific techniques such as Activity-Based Costing (ABC), Total Quality Management (TQM), Management Resource Planning (MRP) and multiple regressions. Organizations started looking for greater quality and costs reductions as well. The fourth stage of management accounting evolution (1985 to 1995) shifts its consideration from waste reduction to value creation, by the optimal use of available tools, technologies, and resources.

Management accounting systems which are decisive for management performance and control will be closely linked to risk management. However, this relation has been discovered and recognized recently and the current literature on this topic remains limited. The following section reviews some important studies on the relationship and the direct link between management accounting and risk management.

Distinctly that the linkage between both of management accounting and risk management is rapidly growing. Authors like Cinquini et al (2015); Laitinen (2014); Weissenberger (2012); Williamson (2004); Collier et al (2004); Mikes (2006) McWhorter et al (2006) Collier and Berry (2002); Sojin (2005) have reached and discussed this linkage. Lopez and Hiebl (2015)

stated that management accounting is the process of analyzing, evaluating, measuring, identifying, interpreting and communicating information in seeks of organization's goals. Management accounting system provides internal financial and non-financial information for the previous and current and the future of an organization; and provides external monetary and non-monetary measurement of the organizational environment (Etemadi et al., 2009 and Hilton and Platt, 2011).

Management accounting system authorizes organization managers to respond towards issues and events rapidly and provide them with quickly feedback for effective decision-making. Several examples of management accounting system practices are cost allocation and product cost measurements; information for decision making; budgeting; incremental analysis for decision making; financial management; and the extreme integration of internal cost accumulation systems with the external financial reporting system (Ajibolade, 2013). In addition, Sunarni (2013) raised three modern management accounting techniques, these involves activity based costing, target costing and kaizen costing. Aziz et al. (2014) states that organization's culture like management information systems can clearly affect employees and consequently affect the organizational performance. This develops the importance of the organizational culture in the stage of linkage or in the relationship between management accounting system and management information systems in organizations.

Williamson (2004) conducted a research clarifying that management has know-how in determining, analysing, and decision making and so on, be able to assist developing enterprise risk management tools and techniques. Moreover, well understanding of organizational economic implication also its behaviour, management accounting should be ready for better explicate and communicate risk management information more effectively. Management accounting is supporting risk management and control whether by assessing, estimating the consequences of expected results from risk events, quantifying objectives, and analysing risk management cost and benefits processes, or comparing the real performance of risks faced. Horngren et al. (2007) write management accounting system involves the process of identifying, measuring, analyzing, preparing, accumulating and communication information that assist managers fulfil organizational objectives. The Chartered Institution of Management Accounting (UK) (2000) shows management accounting as an integral part of management which exactly requires the identification, presentation and use of relevant information to formulating business strategy such as planning and controlling process, decision making and performance improvement and value increase and enhancement.

Mikes (2006) conducted a research to discover the changing context and internal dynamic of a multiple control system in a financial services organization as a contribution to link between risk management and management accounting. The study showed how the firm-wide risk management system and accounting control complemented each other also competing between each other due to their relevance, importance, and attention from the top management. Consequently, accounting system was widely used in organization management decision making.

Woods (2009), on the other hand, conducted a study in a public sector organization focused on the risk management control system. Several variables affected the risk management system at the organizations operational level which is central government policies, communication technology and information, as well organizational size. The study found that the most significant variable was central government policies as plenty of strategic objectives

and resources were determined by the central government. Exactly in the financial institutions where government regulation direct and drives the risk management system.

In another study, Abdul Rasid et al, (2011) examined the link between management accounting and risk management through measures the extent to which management accounting practices assist in managing risk. His study implemented a survey directed to financial institutions listed in the Malaysian Central Banks web site. Finding indicated that budgetary control, budgeting, and strategic planning contribute significantly in managing risk. Furthermore, the management accounting function was extremely involved in the organizations risk management.

Collier et al. (2007) investigated the roles of management accounting in risk management he indicated that management accountants who owns special type of knowledge and skills in information analysis, analysis systems, strategic management as well performance – should have decisive and important role to work in developing and implementing risk management. The research survey results showed that there was little integration between management accounting and risk management and that the participation of management accounting in risk management was just marginal. Significant role for management accountants indicated by post survey interviews in risk management. (Collier et al., 2007) and, normally the management accounting functions in the most of the organizations are totally under the responsibility of finance director.

The issue of risk management accounting was also investigated by Collier and Berry (2002) in manufacturing and not-for-profit organizations. Their research was conducted to understand the relationship between risk and budgeting. The budgeting process is an official method by which plans are created for future time periods, which means a consideration of risk. However, there was a clear separation between both of budgeting and risk management. It manifests that budgeting is not a practical tools used in managing risk. Soin (2005) argued that management accounting supports risk management activities. The author investigated the contribution of management accounting and control information on the risk management practices in the UK financial services sector. She found that there is no obvious role for management accounting system in risk management justifying that through risks were not directly considered in the process of budgeting, performance measurements and cost control. Abdul Rasid et al, (2014) studied the linkages between management accounting systems (MAS), enterprise risk management (ERM) and organizational performance. Finding of this study indicated that implementation of ERM requires the use of sophisticated management accounting system information. Both of ERM and MAS complement each other and they are integral to decision making, planning and control in an organization.

Complexity of the business environment in financial institutions requires that management accounting system provides broad information linked to financial, non-financial, current performance and future performance also both of internal as well as external to the organization (Agbejule, 2005; Bouwens and Abernethy, 2000; Chenhall and Morris, 1986). Aebi et al., (2012) stated that evidence from the recent financial crisis of 2007/2008 “has clearly defined that the business of banks is business of risk”. Aebi et al., (2012) reached to results which showed that banks with accurate and certain risk governance operate significantly greater during the financial crisis.

Low financial performance creates economic pressure on the organizations to alter its management accounting system to increase performance suggested by (Granlund, 2001). In another hand changes in management accounting is accompanied with maximal dependence on accounting information, it resulted an extremely improvement in performance proposed by Baines and langfield-Smith (2003). Consequently, financial performance becomes an essential outcome factor of management accounting change.

Management accounting and risk management integration appears clearly in the field of performance measurement. Balanced scorecard (BSC) is a strategic performance measurement system and enterprise risk management (ERM) as a preferable practice of risk management (McWhorter et al., 2006; Beasley et al., 2006; Scholey, 2006; Ballou et al., 2006). There are four fundamental perspectives for BSC, which are, employees learning and growth, internal business processes, customer satisfaction, and financial performance.

A review of the different studies above explains that management accounting seems to assist and support risk management in various ways. First of all, management accounting proficiency in assessing, identifying, analysing, and communicating management information for planning purposes and control, and performance measurement and decision making can assist in developing methods and techniques for communicating, and establishing an accurate and strong risk management in the organizations. Then, functions of management accounting and risk management are linked with costs and, thus, create possibility for implement management accounting techniques in risk management. Finally, management accounting should work on providing wide channels within organizations for risk management, performance measurement, accountability, and linking strategy.

### Hypotheses development

Recently, Management Accounting System (MAS) becomes an integral part of the management process and activities. According to Chenhall (2003) and Ismail and Isa (2011), appropriate and well-designed MAS helps organizations improving their efficiency and remain competitive will automatically improve the organization's financial performance. According to Mikes (2006) and Woods (2008), both of ERM and MAS are considered as control systems that complement each other which consistent with the contingency theory. Contingency theory depends on a main concept which is "Fit" (Drazin and Van de Ven, 1985). "Fit" clarification made by three different forms which is used in several previous contingency-based management accounting research, are selection, interaction and system approaches. Organizations that implement risk management practises will require MAS information that is costing system and budgeting, information for decision –making and performance evaluation.

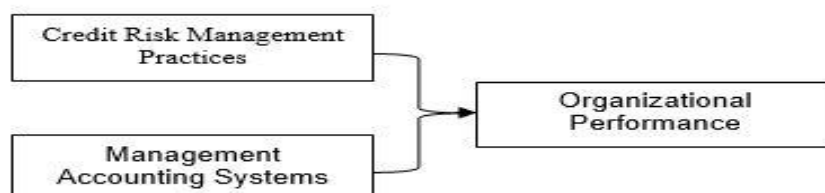


Figure 1: Research model

An accurate match between credit risk management practices and management accounting system information would then lead to higher performance. Therefore, this research will adopt the interaction approach to study credit risk management practices and management accounting system towards Palestinian commercial banks profitability. Following this

approach, is supposed the appropriate fit between CRM and MAS information is represented by the relationship between them.

Thus, the following hypotheses are suggested.

The following hypothesis is addressing the rest of the research questions:

H1. There is a significant level of extensiveness of the risk management implementation at Palestinian commercial banks.

H2. There is a positive relationship between CRM practices and MAS.

H2a. There is a positive relationship between CRM practices and the use of costing system.

H2b. There is a positive relationship between CRM practices and the use of budgeting.

H2c. There is a positive relationship between CRM practices and the use of information for decision-making.

H2d. There is a positive relationship between CRM practices and the use of performance evaluation.

Joint effects between MAS and RM will improve banks performance. In this study, the two organizational attributes are CRM practices and MAS information. These combined effects could be measured through implementing an interaction model. The following hypotheses are subtracted.

H3. The interaction between CRM and MAS is positively associated with organizational performance.

H3a. The interaction between CRM and used of costing system MAS is positively associated with organizational performance.

H3b. The interaction between CRM and the usage of budgeting MAS is positively associated with organizational performance.

H3c. The interaction between CRM and using information for decision-making MAS is positively associated with organizational performance.

H3d. The interaction between CRM and the usage of performance evaluation MAS is positively associated with organizational performance.

## **Methodology**

This study instrument is the survey questionnaire. This instrument was developed by the researcher and other question being adopted by Al-Tamimi and Al-Mazrooei (2007); Abdul Rasid., Abdul Rahman., & Wan Ismail (2011) and Ismail, K., Isa, C.R. and Rasid, Z.S. (2014). The population of the study was commercial banks in Palestine which listed on the Palestinian Monetary Authority web site. Since the information required being focused on management accounting tools and credit risk management practices of the banks, this information must be collected from most qualified respondents were those in the risk management department on banks such as chief executive officers (CEOs), chief risk officers (CROs), chief financial controllers, general managers, risk managers, and bank employees at departments related to risk management in Palestinian commercial banks. Therefore, purposive sampling technique was adopted.

The survey questionnaire was distributed to the commercial banks in Palestine. Its decided by the researcher in this research that questionnaire were to be distributed to the banks in Palestine would be through representative administered of the researcher and it involved a specific respondents and large geographical areas since the respondents are from Gaza Strip City and West Bank. Furthermore, the topic of risk management is considered as advance



technical topic and contained several nomenclature are used widely, some of it are not familiar to the respondents. Through the personally administering the questionnaires, any miss understanding and doubts that appear regarding the meaning of the nomenclature and the question could be clarified directly which increases confirmation of the respondents answer and deal with the questions in the way that it was contagious by the researcher.

## **Data Analysis**

After the stage of collecting survey questions from responses, and establishing coding procedure, the responses data was coded and transferred to the computer for analysis level through using SPSS Windows which is considered statistical software. This statistical analysis can provide several advantages such as creating effective data management SPSS that make data analysis quicker because the program realizes and knows the location of the variables. In addition, the researcher will follow some steps in the process of analysing the data.

Seventy seven questionnaires were distributed to banks, commercial ones, in the two parts of the Palestinian territories that are Gaza Strip and the West Bank. The questionnaires sent to the banks were all collected in different times since there are some difficulties to get them at the same time especially in the Palestinian situation. However, at the end all the questionnaires were answered. Out of 77 respondents, there males seem to be majority with 58 responses with a percentage of 72.5%. The rest, 19, were females with a percentage of 23.8%. Those whose ages are between (46-56), they answered 30 sets of the questionnaires which is the largest number of respondents with a percentage of 37.5%. In term of level of education of the respondents the total of 38 of respondents with a percentage of 47.5% are Bachelor degree holders. Qualification background of the respondent's shows that large number of respondents was studied accounting with a percentage of 26.3%. In term of the department names those whose works on loans, treasury and risk management departments comes with the largest number of respondents with a percentage (14%, 12% and 11) respectively. Reliability means the consistency and stability of a particular set of items used in measuring a variable. In order to test the reliability of the instrument, the most commonly used test is Cronbach's Alpha. The test is performed on each variable used in a study to obtain the reliability coefficients that is Cronbach's Alpha coefficients. In this research the scales used in the questionnaire were measured for internal consistency using Cronbach's alpha. A reliable scale should have an alpha of at least 0.7 (De Vaus, 2002 view). The results are presented in table. The results show high alpha value ( $> 0.7$ ) which indicate that each scale of the questions measures a single concept and the items that make up the scale are internally consistent. From table 1 the recorded scores indicate that there was a good internal consistency among the items.

## ***Measurement of variable***

There were three essential variables at this section, MAS, ERM and organizational performance. Table 1 shows the operational definitions of the three main variables. MAS measures the extent to which banks use MAS information in terms of costing system, budgeting, information for decision-making and performance evaluation. This measure was adapted from Rasid and Abdul Rahman (2009), Ismail and Isa (2011), Rasid, Isa and Ismail (2014) CRMP measures the extent of CRMP implementation based on the Bank of International Settlement report (2013). The component were establishing an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate

credit administration, measurement and monitoring process, ensuring adequate controls over credit risk and the role of supervisors.

**Table 1: Operational definition of variables**

<b>Management Accounting System (MAS)</b>	The extent to which financial institutions use MAS information in term of costing system, budgeting, information for decision-making, & performance evaluation
<b>Credit Risk Management Practices (CRMP)</b>	CRMP measures the extent of CRMP implementation based on the Bank of International Settlement report (2013)
<b>Organizational Financial Performance</b>	Organizational performance measures the extent to which the organization has been successful in attaining its planned targets

Organizational Financial performance measures the extent to which the organization has been successful in attaining its planned targets. The overall measure of banks and institutions as general profitability which clearly reflects both of profit margin and the institutions efficiency is return on asset. Abilities of microfinance institution on determining the revenue impact of policy changes are done based of analysis of this ratio. The respondents were asked through this research questionnaire to indicate the extent to which their organizational have been successful in attaining their planned targets by considering only these performance targets are relevant to their organization. Likert scales of 1 to 5 were used in the questionnaire. The drafted questionnaire has been pilot tested on several risk management officers and banks employees of commercial banks in Palestine. The drafted questionnaire was also given to several employees at risk management department of several banks. The questionnaires given were printed on an A4 size paper with two pages on the same sheet. Time required to answer the questionnaire was about one hour. Generally respondents agreed with the questions asked.

## **Results and Discussion**

This study investigated the characteristic of MAS information that match CRMP implementation through conducting the selection form of “fit”. A further preliminary step before conducting a bivariate correlation matrix and multiple regression analysis for all variables.

### ***Hypothesis testing: H1***

Table 2 shows the status of the risk management framework in the Palestinian banking system. As for the first ranked sub-question, it is the fully implementation of ERM framework in Palestinian banks, with 32 of frequency and with a percentage of 40%. The sub-question is “Do you have fractional ERM framework currently on Palestinian Banks?” is ranked second with a frequency of 20 and a percentage of 25%. The third rank goes to the third sub-question which is about not having ERM framework but there is planning to implement. It is frequency came to be 14 and 17.5% percentage. The fourth sub-question is about investigating the concept of ERM. It is ranked four in the list with frequency of 11 and a percentage of

13.8%. Most of the Palestinian commercial banks has a complete implementation for ERM framework. Hence, H1 is fully supported.

**Table 2: Percentage of the status of Implementation of Enterprise Risk Management**

<b>Please select the currently applicable steps of risk management (RM) framework on your bank?</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Rank</b>
Fully Implement RM framework currently on Palestinian Banks.	32	40	1
We have fractional RM framework currently on Palestinian Banks.	20	25	2
We don't have RM framework but there is planning to implement on.	14	17.5	3
We are investigating the concept of RM.	11	13.8	4

***Hypothesis testing: H2***

**Table 3: Correlation of Credit Risk Management Practices and Management accounting system**

		<b>Costing System</b>	<b>Budgeting</b>	<b>information for decision-making</b>	<b>Performance Evaluation</b>	<b>Organizational financial performance</b>
CRMP	Pearson Correlation	.033	.034	.453	.458	
CRMP						.001
Note: ** Correlation is significant at 0.01 level (2-tailed).						

The appropriate “fit” between CRMP and MAS information characteristic is represented by the relationship between the two. The relationship between CRMP and MAS was analysed using the correlation matrix. Results indicate that CRMP was insignificant related to MAS that are information for decision- making and performance evaluation (table 3). The positive and significant relationship between CRMP and MAS just appeared in two dimensions which are costing system and budgeting. This insignificant relationship between CRMP and last two dimension of MAS (information for decision –making and performance evaluation) suggest that an increase level of CRMP implementation is necessary associated with an increase level of implementing MAS. Therefore, **H2**: it comes with a medium degree of accreditation.

***Hypothesis testing: H3***

Compatible with Bisbe and Otley (2004), the interaction effect between MAS and CRMP was testing using moderating multiple regressions. These hypotheses can be illustrated in a moderated regression equation as:

$$\text{Financial performance} = \text{Constant} + B1 \text{MAS} + B2 \text{MAS} + B3 \text{MAS} + B4 \text{MAS} + E$$

Table 4 shows the moderated regression for the effect of the interaction between MAS and CRMP on organizational financial performance. The results shows that interaction of costing system with CRMP on banks profitability is negative significant ( $\beta = -.248$ ,  $p < 0.05$ ), interaction of budgeting with CRMP on banks profitability is negative insignificant ( $\beta = -.089$ ,  $p > 0.05$ ), interaction of information for decision making with CRMP on banks profitability is positive insignificant ( $\beta = .260$ ,  $p > 0.05$ ), interaction of performance evaluation with CRMP on banks profitability is positive insignificant ( $\beta = .074$ ,  $p > 0.05$ ). Therefore, the result indicates that management accounting system with credit risk management practices has insignificant affected the organizational financial performance.

**Table 4: Results of moderated regression**

	Regression Coefficient	Coefficient Value	SE	t-value	Probability
<b>Costing System× CRMP</b>	$\beta$	-.248	.252	-2.371	.020
<b>Budgeting× CRMP</b>	$\beta$	-.089	.270	-6.73	.503
<b>Information for Decision-Making× CRMP</b>	$\beta$	.260	.364	1.758	.083
<b>Performance Evaluation× CRMP</b>	$\beta$	.074	.201	.634	.528

**H3** assumes that the interaction between CRM practices and MAS is positively associated with organizational performance. This hypothesis is minimally supported as only the interaction between costing system and CRM practices on organizational performance was statistically significant.

### Discussion and Conclusion

The main aim of this study was to investigate the interconnection between MAS, CRM practises and organizational performance. This study surveyed 11 commercial banks in Palestine based on the IFAC's (1998) framework and the Bank of International Settlement report (2013). The first objective was to locate the status of Enterprise Risk Management implementation; most of the Palestinian commercial banks have a complete implementation for ERM framework. Commercial banks are preferring to adopt ERM because of obvious instructions comers from Palestinian Monetary Authority side to ensure more effective and efficient risk management system.

Management accounting system specialized in assessing, analysing, identifying, as well as communicating management information for planning and performance measurement and decision making can create and develop unique communicating techniques. Organizations that implement credit risk management practises will require MAS information that is costing

system and budgeting, information for decision –making and performance evaluation. In light of the finding about the relationship between CRM practices and MAS some management accounting practices works to assist in managing credit risks such as costing system and budgeting. Both of management accounting and risk management must be the integral management instruments to complete each other toward achieving appropriate corporate performance. The Palestinian Monetary Authority as the main regulator should encourage best management practices such as management accounting system and ERM at their financial system and among its financial institutions to reach for a level of comply with regulation.

Another objective was to investigate the combined effect of MAS and CRM practices on organization performance implementing the interaction for of “fit” to contingency-based research. The significant interaction between costing system MAS and CRM practices suggests that the higher the CRM practices, the stronger the relationship between the use of costing system MAS and organizational performance. The significant interaction between the use of costing system and credit risk management practices serves Palestinian commercial banks management in different ways. These are the classification and sub-divisions of costs, the help of management to take vital decisions like selection of profitable product max, utilisation of spare capacity and exploration of additional market, the several standards offered to assist management in making estimates and plans for future and providing the basis of management of efficiency, the way of management enhancement with valuable data for planning, budgeting and control of costs and the management informing about the special factors such as optimum profitability, seasonal variations in volume and costs, idle time of labour and idle capacity of the machine. Consequently, it’s conspicuous that RM practices works to improve an organization to deal with information, definitely improving organizational performance (Mikes, 2006; Williamson, 2004 and McWhorter et al. 2006).

The study was subjected to three main limitations. First, this study was limited to the Palestinian Commercial banks that are due to the unavailability of information in annual reports and Islamic banks have been excluded. Secondly, this study just measured only Palestinian commercial banks; therefore the findings cannot be generalized and implemented to any other countries. Finally this study just covered MAS which consider as sub-control system in an organization, CRM practices, and organizational performance. The further research can investigate the relationship between entire controlling system, and risk management practices, and organizational performance. Nevertheless this study had added to our limited understanding the importance of management accounting practices and risk management implementation in commercial banks.

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